

60137-245/185-3067  
Serial No. 10/781,411, filed 2/18/04

Therefore, there is no need or benefit to provide *Nennecker* with another way of introducing a material. Accordingly, claims 1, 2, 4-10, 15, and 17 are properly allowable.

Additionally, the proposed combination would ruin the goal in *Nennecker* of providing superior mixing of materials before discharge into the mold. The materials in *Nennecker* are introduced into the chamber (26) in such a way as to doubly mix the materials before introduction into the chamber (36). If the plunger rod (21) of *Nennecker* was provided with the gas introduction system of *Csongor*, the gas introduced through the plunger rod (21) into the chamber 36 would not undergo the double mixing that occurs in the chamber (26). This negates the goal of double mixing. For this additional reason, claims 1, 2, 4-10, 15, and 17 are properly allowable.

Additionally, even if the proposed combination were proper, the proposed combination fails to disclose all of the limitations of claim 4, recites that said piston is selectively moveable to block an air inlet through said mold valve chamber. In *Csongor*, the gas, vapors, or liquids are blocked from introduction into the melt by air pressure or a spring-loaded mechanical actuation in the screw (14) [see col. 5, lines 55-59]. Thus, piston movement in *Csongor* does not block an air inlet. For this additional reason, claim 4 is properly allowable.

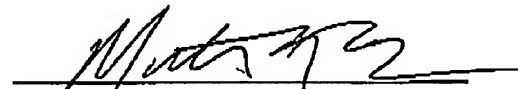
Claims 3 and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Nennecker* in view of *Csongor*, and further in view of *Takizawa*. The Examiner contends that *Takizawa* teaches a piston (32) having seal rings (31) that are equivalent to the non-metallic portion being between metallic portions. The Examiner argues that it would have been obvious to provide the valve of *Nennecker* with the seal rings (31) of *Takizawa* to seal the valve within the chamber. Applicant respectfully disagrees. There is no motivation for locating seal rings on the piston, as the figures in *Nennecker* show a tight fit between the piston (21) and the walls of the discharge passage (36) [see Figures 1 and 1A] that already provides sealing. Therefore, there is no motivation to use sealing rings or even expect to improve the sealing between the piston (21) and the discharge

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passageway (36) by providing the sealing rings. Accordingly, claims 3 and 16 are properly allowable.

Applicant believes that no additional fees are necessary, however, the Commissioner is authorized to charge Deposit Account No. 50-1482 in the name of Carlson, Gaskey & Olds for any additional fees or credit the account for any overpayment.

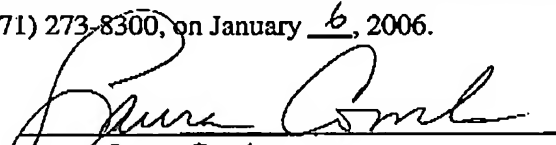
Respectfully submitted,

  
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CERTIFICATE OF TRANSMISSION UNDER 37 CFR 1.8

I hereby certify that this correspondence is being facsimile transmitted to the United States patent and Trademark Office, fax number (571) 273-8300, on January 6, 2006.

  
Laura Combs